

OPTITOME²

Rugged high-precision machine
developed especially for HD plasma
cutting applications



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OPTITOME²

A machine designed for use with FINELINE[®] HD and FLEXCUT[®] plasma installations to achieve very high cutting quality. Its single-piece construction is highly sturdy, allowing simple and quick assembly. This machine can handle heavy-duty production work.

Centralised control system

- Large tactile screen integrates machine management and cutting parameters.
- Quick access to manual functions to facilitate cutting operations.

A design that optimises production

The table has compartments at every 600 mm

A cam connected to the end carriage of the machine beam activates pneumatic switches to select extraction from the compartments used while cutting.

Each compartment has air diffuser boxes for:

- evenly distributing extraction around the cutting area.
- protecting the sides of the table from heating.
- protecting the air extraction opening hatches.
- collecting the cutting slag or pieces.

The extraction louvers are located at the top of the boxes.

As a result, they are less sensitive to the build-up of slag or pieces at the bottom of the boxes.

This design helps extend the effectiveness of extraction.

The plate support frame can be folded away easily to have access to air diffuser boxes.

It has plate holder irons measuring 100 x 4 mm placed at every 50 mm.



Positioning laser

Green cross type positioning laser to make it easier to position the torch or align the program on the plate.



Transverse guiding system

The transverse carriage is guided by two flat-bottom rails that provide smooth guidance and accurate positioning.

The racks are turned backwards, and fully protected from splatter.

Emergency stop



The machine complies with the applicable Machinery Directive 2006/42/EC, which makes it necessary to have several emergency stop points for optimum safety. Further, it is interconnected to the environment: process and extraction and treatment of cutting fumes.

Drive units of the machines

Brushless geared motors with low backlash and maintenance-free, fitted with 750 W motors with a quick replacement system.

The assembly is controlled with a new-generation ETHERCAT communication variator and ensures smooth movement for the machine, which allows you to reach high cutting quality levels.

With absolute encoder technology, the machine is ready to produce as soon as it is turned on, and production restart in the event of incidents or power failures are simplified.



Longitudinal guiding

Flat-bottom rails that allow smooth guiding and high positioning accuracy. They are fully protected from falling pieces or plates by the edge of the table.



The racks are turned downwards, and are thus fully protected from splatter.

The dual power system drives the machine smoothly.



Main options

Oxyfuel cutting

Torch assembly with its gas circuit OXY ESSENTIAL with automatic gas adjustment and its electric igniter integrated into the MACH HPI torch. The assembly can be mounted easily instead of the plasma torch in the torch impact safety system of the numerical tool holder.

The torch thus benefits from the impact safety system, which protects it from tilting pieces, for instance.

The maximum cutting capacity is 50 mm.

Pipe cutting

For cutting shapes of all types in round pipes: openings, cod mouth, holes, cutting to length etc.

Maximum length: 2, 3, 4 or 6 m depending on the size of the machine.

Maximum diameter: 350 mm, 10 mm thick.

Central extraction *(in line with the stock)*.

Pipe holding system with mandrels and spider rotators or spider rotators with rollers.



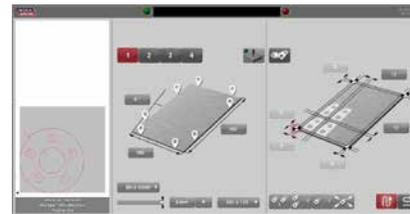
HPC digital process III

Educational, intuitive, automatic.

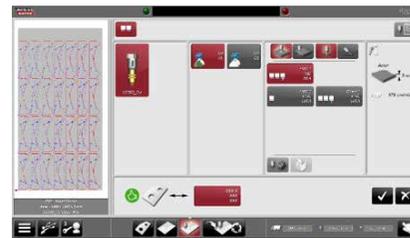
The most intuitive and efficient digital control on the market. It fully manages the cutting machine: from the trajectory to the processes.

The ergonomics of the HMI and its large 21" 16/9 touch screen make it operator friendly and easy to use.

How does the automatic adjustment of processes work on HPC III ?



Program selection material, thickness, sheet format



HPC III offers one or more cutting solutions



The adjustment of all parameters is done automatically



ULTRA SHARP2 function integrated database offering up to 10 cutting qualities

FINELINE® HD

FINELINE® HD power sources designed for high quality cutting and cost reduced production.

- Reliable technology, 3 year warranty
- Reduction of gas consumption
- Increased life time of wearing parts

FINELINE® 170HD

- 170 A @ 100 %
- 30 mm production piercing plate
- 50 mm sheet metal edge

FINELINE® 300HD

- 300 A @ 100 %
- 45 mm production piercing plate
- 50 mm* sheet metal edge [* limit of table]



FLEXCUT®

FLEXCUT® power sources designed for economical air-plasma cutting with good quality.

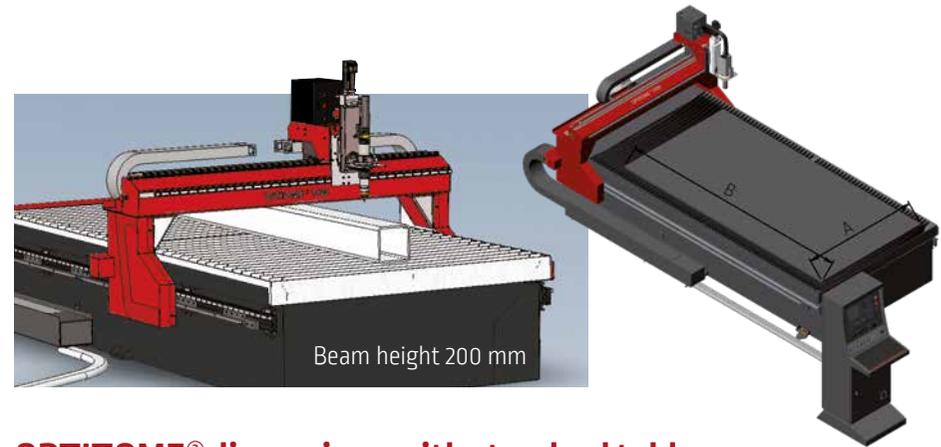
FLEXCUT® 125

- Cost effective cutting or marking Air/Air
- 125 A @ 100 %
- 30 mm production piercing plate
- 45 mm sheet metal edge

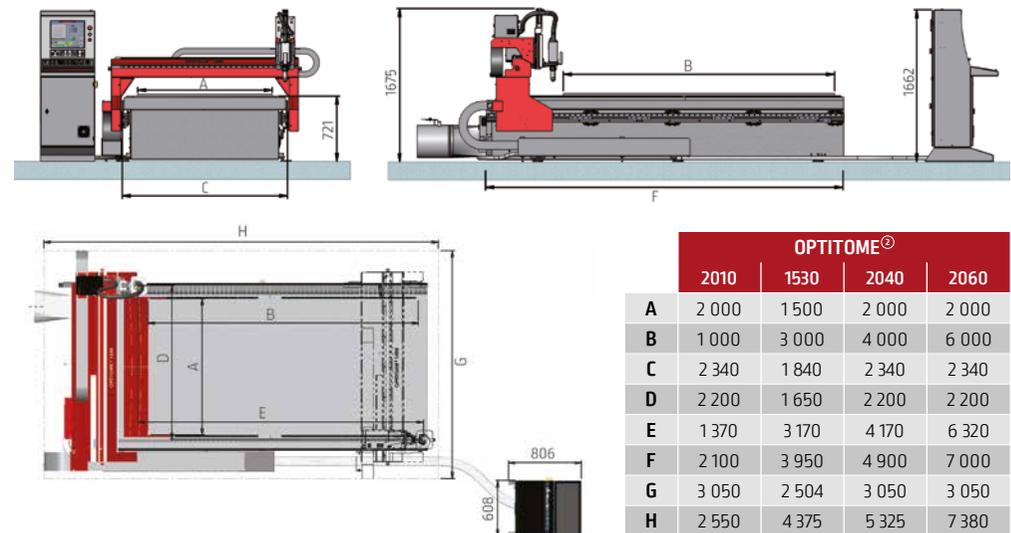


Main technical specifications:

CNC	HPC DIGITAL PROCESS III EtherCAT with joystick and teleservice with ETIC module
Cutting dimensions	2 000 x 1 000 mm / 1 500 x 3 000 mm / 2 000 x 4 000 mm / 2 000 x 6 000 mm
Thickness	Max. 50 mm
Displacement speed	22,5 m/min (maximum speed when X and Y move at the same time in manual mode) 15 m/min in automatic production
Positioning accuracy	0,05 mm
Drive units	<ul style="list-style-type: none"> ■ BRUSHLESS EtherCAT 750W ■ Absolute encoders ■ Low backlash and maintenance-free geared motors
Transverse guiding system	Machined beam incorporating racks and flat-bottom rails
Longitudinal rails	Full protection for rails with racks and flat-bottom rails
Frame height	700 mm to 750 mm
Beam height	It makes it possible to place rectangular pipes up to 200 mm high
Support table	<ul style="list-style-type: none"> ■ With compartments over every 600 mm, with pneumatic selection ■ Each compartment has a box for diffusing air and recovering splatter
Machine safety systems	Compliant with machine directive 2006/42/EC
Plasma process	FINELINE® 170HD or 300HD , FLEXCUT® 125
Oxyfuel process	MACH HPI torch



OPTITOME® dimensions with standard table



CUSTOMER ASSISTANCE POLICY

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